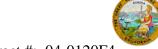
#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-019926

Address: 333 Burma Road **Date Inspected:** 23-Mar-2010

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Liu Hua Jie, Lu Li Qing, Geng Wc WI Present: Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A

N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Orthotropic Box Girder (OBG)

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Assembly, Bay 14, 11DW, CA089, Edge plate to Deck plate.

SMAW Repair welding of weld joint CA089-004 (CWR # B-CWR1321); located on assembly, Bay 14, 11DW. Welder is identified as 647864; ZPMC Quality Control Inspector (QC) is identified as Liu Hua Jie. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-SMAW-2G(2F)-FCM-REPAIR-1.

Assembly, Bay 14, 11AE, SP3002A, T-Rib to T-Rib.

SMAW welding of weld joint SP3002A-001-087, 089, 091, 093, 097, 099; located on assembly, Bay 14, 11AE. Welder is identified as 067904; ZPMC Quality Control Inspector (QC) is identified as Geng Wei. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-P-2114-FCM-1.

Assembly, Bay 14, 12CW, PP117.

During the Quality Assurance (QA) random in-process visual inspection, this QA inspector ZPMC Personnel performing fit up & Tack welding of Floor Beam Identified as FB3077A-001. The attached photographs provide additional detail.

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Assembly, Bay 14, 12BE, CA3002, PP114.

During the Quality Assurance (QA) random in-process visual inspection, this QA inspector ZPMC Personnel performing fit up of Corner Assembly Diaphragm Identified as CA3002C-001 The attached photographs provide additional detail.

Assembly, Bay 14, 12BE, Deck Pannel Diaphragms, PP113.

During Random Visual in process Inspection, this QA inspector observed ZPMC & AB/F personnel performing Visual testing (VT) on deck panel to Deck Pannel Diaphragm welds. Deck Pannels are identified as DP3019, DP3020 & DP 3021. The attached photographs provide additional detail.

Assembly, Bay 14, 11EW, Deck Pannel DP296A.

During Random Visual in process Inspection, this QA inspector observed ZPMC personnel Heat Straightening Deck Pannel DP296A. ZPMC QC Li Ming Yang showed Heat Straightening Report HSR # 8195. The attached photographs provide additional detail.

Assembly, Bay 13, Mock-Up for 13AE.

During the Quality Assurance (QA) random in-process visual inspection, this QA inspector observed ZPMC carring out Mock-Up for 13AE. This QA inspector noticed following things

- BP032-004 welding in process.
- BP032-005 welding in process.

Subassembly, Bay 03, Mock-Up for 13AE.

During the Quality Assurance (QA) random in-process visual inspection, this QA inspector observed ZPMC carring out Mock-Up for 13AE. This QA inspector noticed following things

- ZPMC working on floor beams for 13AE.
- FB3109A & FB3111A welding in process.
- Crack like indications, porosity(isolated in crater) observed at the ends of the tack welds.

Training for Phased Array Ultrasonic Testing.

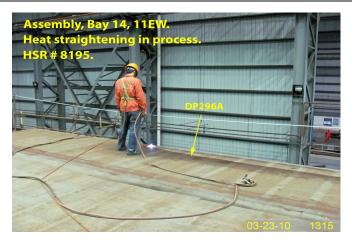
This QA inspector attended Training for Phased Array Ultrasonic Testing (PAUT) from 1600Hrs. to 1900Hrs.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)









## **Summary of Conversations:**

No relevant conversations.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 1500.042.2372, who represents the Office of Structural Materials for your project.

Inspected By:	Juvekar,Amit	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer